



Specifications

for

OSC-KVS Outdoor Unit Antenna

Customer part number

Company part number

**WA-OSC-KVS Outdoor Unit 2.4G WIFI -
FPC - 270MM**

Prepared by: Zeng Xiaofeng Reviewed by: Li Ming

Date: June 4, 2026

Shenzhen Shuodian Electronics Technology Co., Ltd

Unit 201, Building 2, Nantai Yunchuanggu Industrial Park, Tangwei Community, Fenghuang Subdistrict, Guangming District,
Shenzhen City, Guangdong Province

Email: sz_shuodian@163.com

Phone: 0755-86006322

Fax: 0755-86006323



Catalog

Specification.....	1
Shenzhen Shuodian Electronics Technology Co., Ltd.....	1
Catalog.....	2
1.Both Parties Confirm.....	3
2.General Matters.....	4
3.General Specification of the Products.....	4
4.Product Specifications Details.....	5
4.1Product structure parameters.....	5
4.2Product electrical performance test data.....	7
5. Product packaging method.....	9
6. Document resume.....	10



1.Both parties confirm

1.1 Customer Confirmation Signature

Customer:

Customer Department/position	Confirmed by Signature	Confirmation Date
Hardware/RF		
Structure		
Project Manager		
Business/Purchasing		
Review		

1.2 Shuodian Technology Confirms Signature

Customer Department/position	Confirmed by Signature	Confirmation Date
Antenna Engineer		
Structural Engineer		
Project Manager		
QA		
Review		



2.General matters

2.1 Scope of application

This antenna is used for the OSC-KVS outdoor unit WIFI

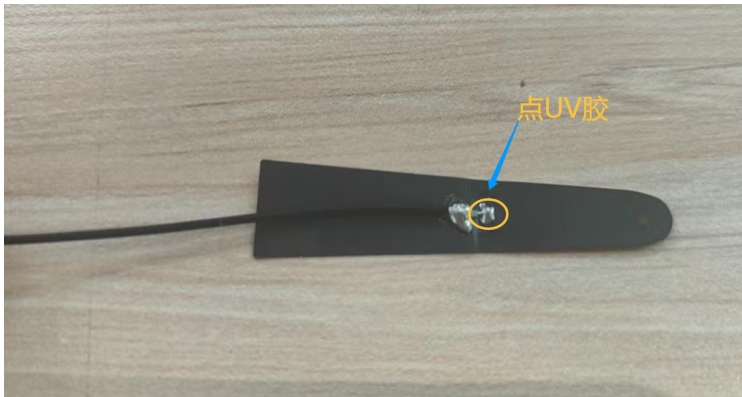
2.2 Operating temperature range

The operating temperature range of this product is -20 to 65° C

2.3 Storage temperature range

This product should be stored at -30 to 75° C

3.Product General Specifications

NO .	ITEMS	DETAILS
1	Model	OSC-KVS ourdoor unit WIFI
2	Frequency band	2400MHz-2500MHz
3	VSWR	≤2.0
4	Gain	1.4dBi
5	Impedance	50 Ω
6	Antenna Type	Dipole
7	Antenna picture	



4. Product Specifications Details

4.1 Product structure parameters

4.11 Product material composition:

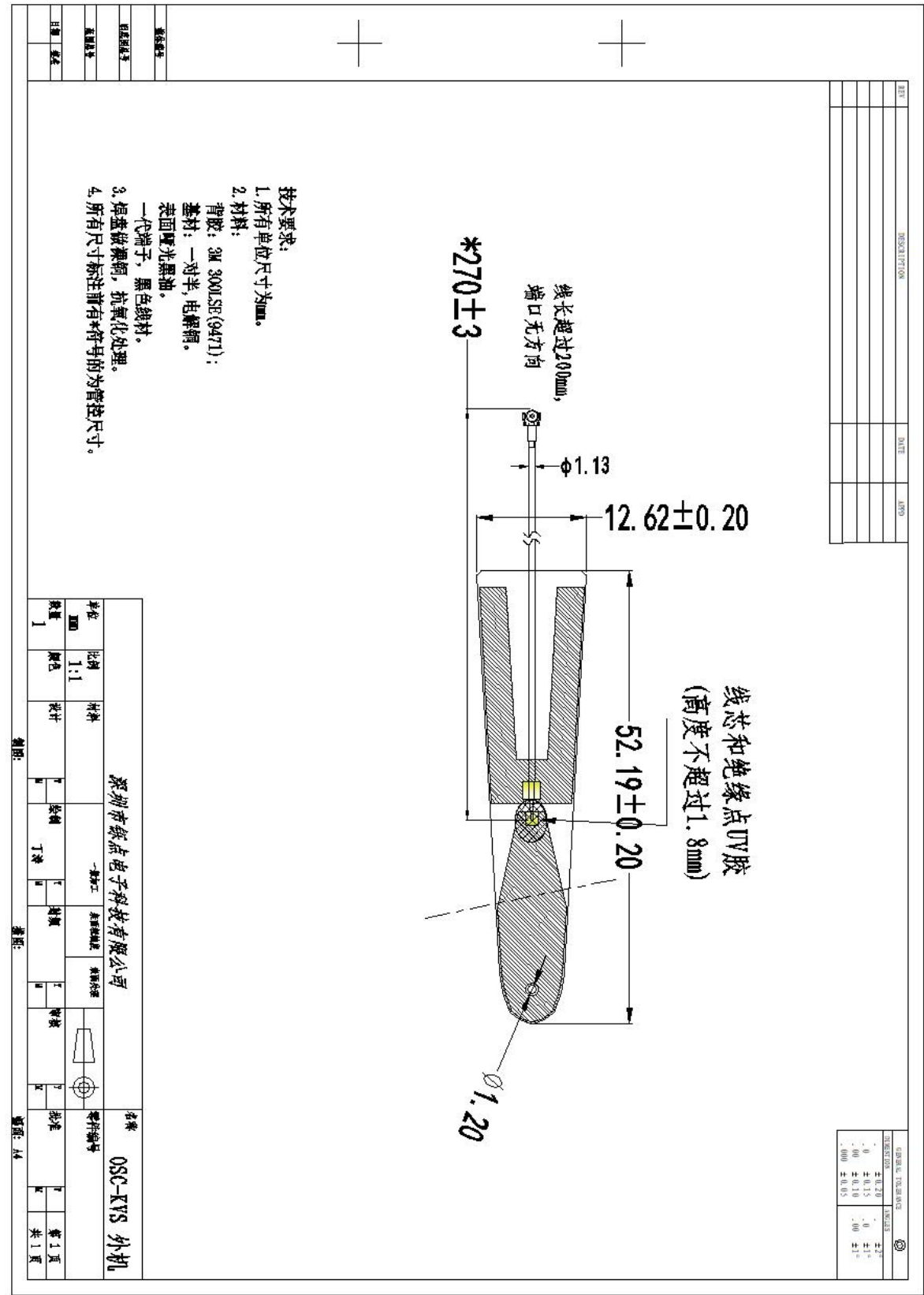
Serial number	Material	Specs (MM)
1	FPC	52.19*12.62 black
2	Coaxial cable	One generation terminal, wire diameter $\phi 1.13$, black wire, wire length 270

4.11 Appearance

The product looks good, with no scratches, sweat marks, bumps, or other major defects that affect its appearance.

4.12 Structural dimensions

Product drawings:





4.2 Product electrical performance test data

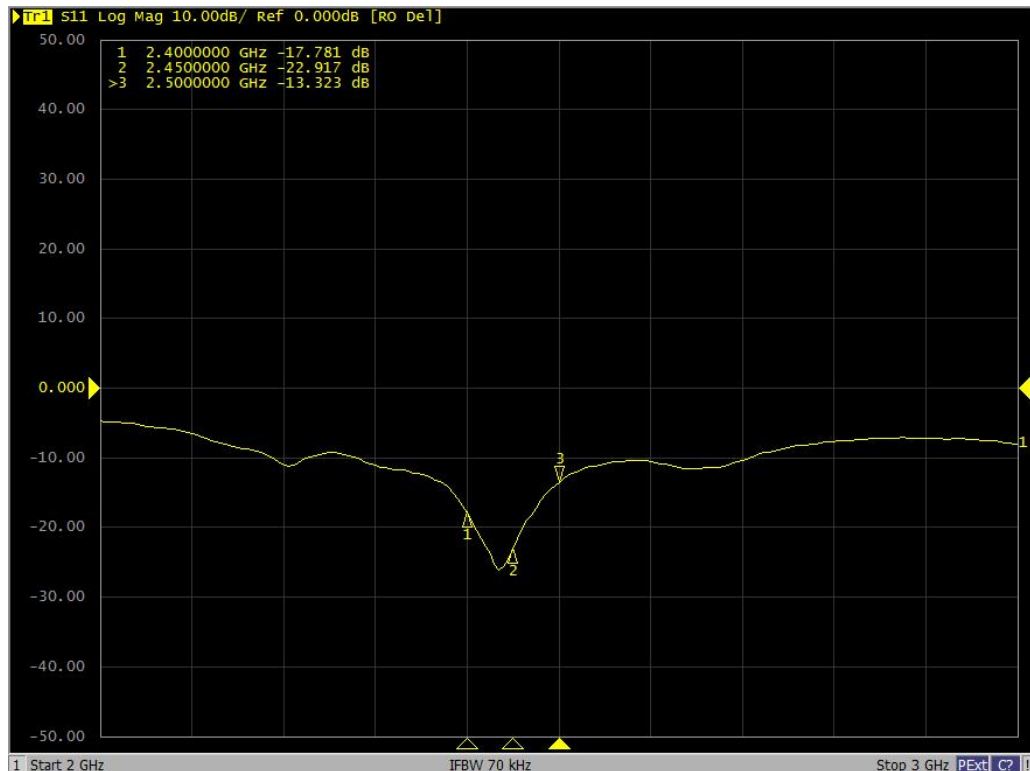
4.21 Test environment and equipment

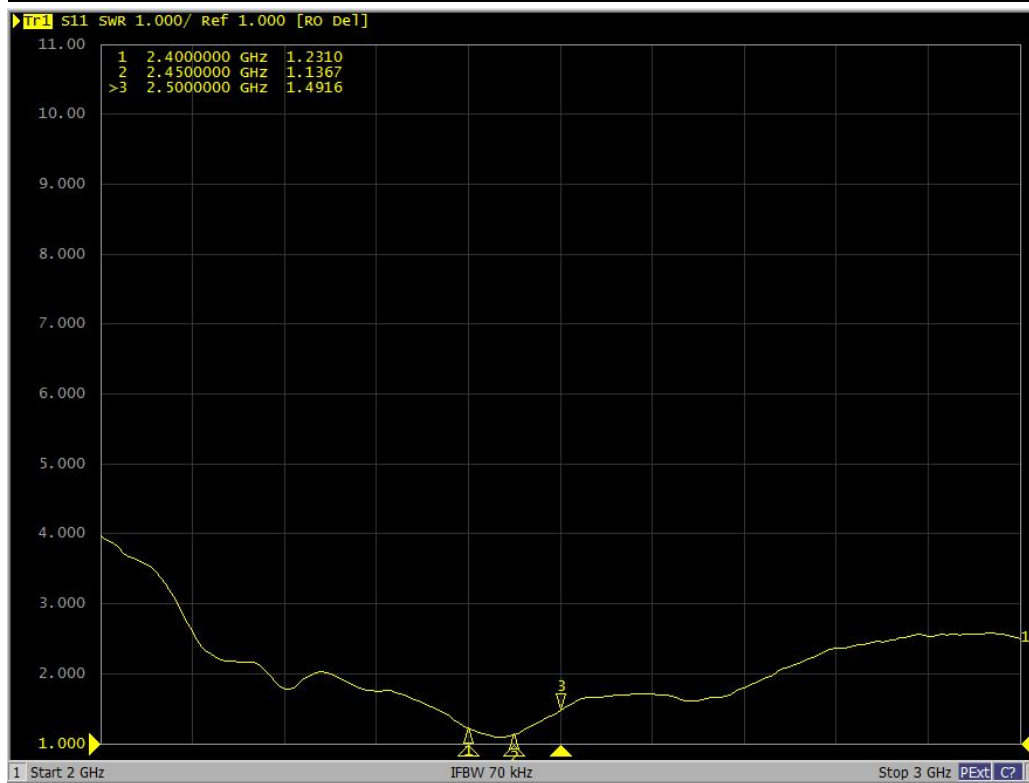
Test environment:	Test equipment:
Temperature: 10℃——+30℃	Network analyzer
Relative Humidity: ≤80% (+40℃)	KEYSIGHT E5071C
Air pressure: 750mmkg±30mmkg	Multi-probe microwave anechoic chamber

4.22 Product electrical performance test data:

4.22.1 The product's S11 diagram:

Marker (MHz)	2400	2450	2500
Return Loss	-17.78	-22.91	-13.32
VSWR	1.23	1.13	1.49





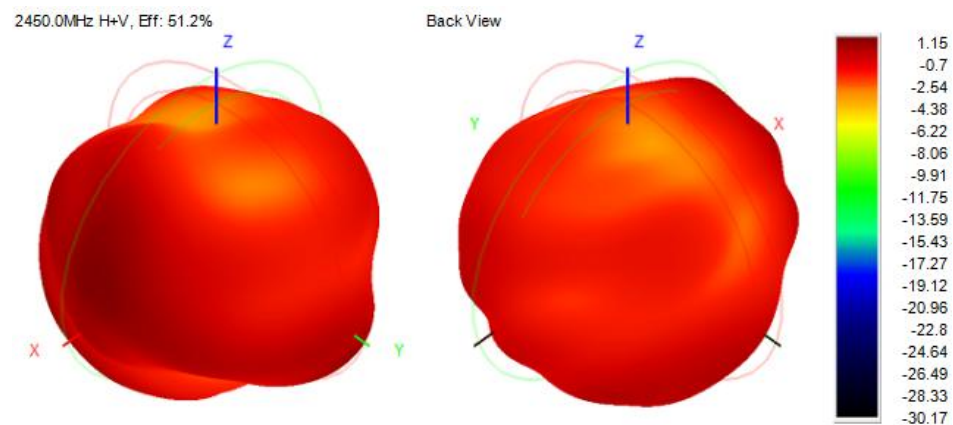
4.22.2 Antenna gain efficiency and radiation pattern:

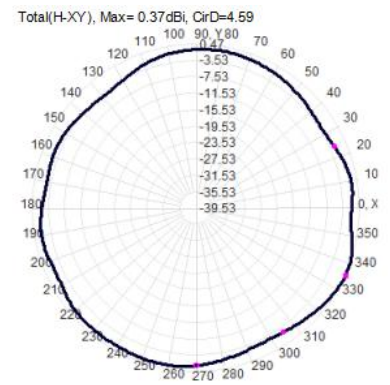
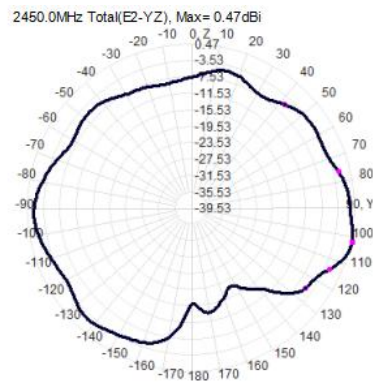
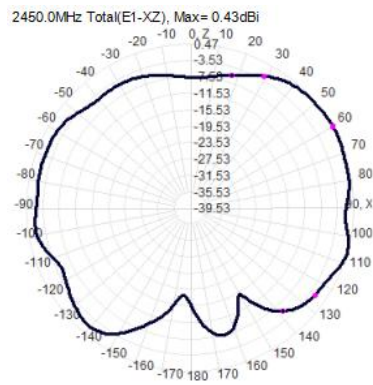
Antenna gain efficiency:

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	1.05	1.33	1.36	1.40	1.27	1.15	1.12	0.89	0.81	0.78	0.61
Efficiency (%)	49.83	51.10	50.49	50.52	50.82	51.24	51.19	51.41	49.93	50.19	49.55

Direction map:

2450MHz:





5. Product Packaging Method

Packaging method:

Self-sealing bag packaging, 200 pieces per pack.



6. Document History

文件编号/Document No.	
日期/Release Date	2026/06/04
编制/Author	Hungjie
复核/Review	WH

文件历次表

Revised History

Date	Version	Revised Record
2026/06/04	1.00	New Project